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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/736,450

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Rodney A. Hughes

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EXAMINER

LAM, TUAN THIEU

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/736,450

Applicant(s)

HUGHES, RODNEY A.

Examiner

Tuan T. Lam

Art Unit

2816



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-39 is/are rejected.
- 7) ☒ Claim(s) 40-43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

This is a response to the amendment filed 9/20/2004. Claims 24-43 are pending and are under examination.

#### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 24-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 24, the recitation of “capable of” in lines 2, 4, 6 and 9-10 is indefinite because it is not a positive recitation. It is suggested to delete “capable of”.

In claim 26, the recitation of “capable of” in lines 2-5 is indefinite because it is not a positive recitation. It is suggested to delete “capable of”. The recitation of “the first switch capable of being controlled by the first control signal” is indefinite because it is misdescriptive. As forth in claim 24, the first control signal (the output of the comparator 350, PUMP UP CONTROL) control the current source 320 of figure 3. The first switch as recited in claim 26 is seen to be the switch 332 controlled by the PUMP UP signal which is different from the first control signal. The recitation of “the second switch capable of being controlled by the second control signal” is also indefinite for the same rational as noted above. Correction is required.

In claim 27, the recitation of “capable of” in lines 2-3 and 5-6 is indefinite because it

Art Unit: 2816

is not a positive recitation. It is suggested to delete “capable of”. The recitation of “an AND gate capable of receiving first and second control signals” is indefinite because it is misdescriptive. As set forth in claim 24, the first and second control signals being the PUMP UP CONTROL and the output of the circuit 370 of figure 3, respectively. The AND gate of figure 3 receives PUMP UP and PUMP DOWN signals which are not the first and second control signals as set forth in claim 24. Correction is required.

In claim 29, the recitation of “capable of” in line 2 is indefinite because it is not a positive recitation. It is suggested to delete “capable of”.

In claim 30, the recitation of “capable of” in lines 5, 7, 9, 10, 12 and 13 is indefinite because it is not a positive recitation. It is suggested to delete “capable of”.

In claim 32, the recitation of “capable of” in lines 3-6 is indefinite because it is not a positive recitation. It is suggested to delete “capable of”. The recitation of “the first switch capable of being controlled by the first control signal” is indefinite because it is misdescriptive. As forth in claim 30, the first control signal (the output of the comparator 350, PUMP UP CONTROL) control the current source 320 of figure 3. The first switch as recited in claim 26 is seen to be the switch 332 controlled by the PUMP UP signal which is different from the first control signal. The recitation of “the second switch capable of being controlled by the second control signal” is also indefinite for the same rational as noted above. Correction is required.

In claim 33, the recitation of “capable of” in lines 3-4 and 6-7 is indefinite because it is not a positive recitation. It is suggested to delete “capable of”. The recitation of “an AND gate capable of receiving first and second control signals” is indefinite because it is

Art Unit: 2816

misdescriptive. As set forth in claim 30, the first and second control signals being the PUMP UP CONTROL and the output of the circuit 370 of figure 3, respectively. The AND gate of figure 3 receives PUMP UP and PUMP DOWN signals which are not the first and second control signals as set forth in claim 30. Correction is required.

In claim 35, the recitation of "capable of" in line 2 is indefinite because it is not a positive recitation. It is suggested to delete "capable of".

In claim 36, the recitation of "capable of" in lines 3-4 and 6-7 is indefinite because it is not a positive recitation. It is suggested to delete "capable of". The recitation of the phase frequency detector generating the first and second control signals is indefinite because it is misdescriptive. As set forth in claim 30 the first and second control signals are seen to be the PUMP UP CONTROL signal and the output of the circuit 370. The phase frequency detector generates the PUMP UP and PUMP DOWN signals are not the same as the first and second control signals set forth in claim 30. Correction is required.

In claim 37, the recitation of "capable of" in line 2 is indefinite because it is not a positive recitation. It is suggested to delete "capable of".

Claims 25, 28, 31 and 34 are indefinite because of the technical deficiencies of claims 24 and 30.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Art Unit: 2816

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 24-25, 28-31, 34-35 and 38-39 are rejected under the judicially created doctrine of double patenting over claims 1, 4 and 10 of U. S. Patent No. 6,664,829 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

Regarding claims 24-25, 29 and 38-39, claim 1 of USP 6,664,829 recites a first current source, second current source, third current source and fourth current source (column 6, lines 57-67), a circuit capable of detecting a voltage difference between a voltage on the loop filter and a voltage on the integrator capacitor (column 7, lines 11-14), common control signal (column 7, line 2-3).

Regarding claims 28 and 34, claim 4 of USP 6,664,829 recites an amplifier.

Regarding claims 30-31 and 35 claim 10 of USP 6,664,829 recites a phase locked loop comprising a charge pump and the charge pump comprises a first current source, second current source, third current source and fourth current source (column 7, lines 50-67, column 8, lines 1-18), a circuit capable of detecting a voltage difference between a voltage on the loop filter and a voltage on the integrator capacitor (column 7, lines 11-14), common control signal (column 7, line 2-3).

Art Unit: 2816

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

***Allowable Subject Matter***

5. Claims 26-27, 32-33, 36-37 and 40-43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2816

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Lam whose telephone number is 571-272-1744. The examiner can normally be reached on Monday to Friday (7:30 am to 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY P CALLAHAN can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tuan T. Lam  
Primary Examiner  
Art Unit 2816

10/18/2004